Update of D0 Linux Cluster at LaTech

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D0RACE

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History

- We have 9 Linux pc's, each with ~ 10-12 Gbyte.
- One of these (my pc) used as a test unit for a future cluster for D0 analysis at LaTech.
- Over a year ago, installed Fermi Redhat 6.1.1 Linux and a test version of D0RunII following H. Schellman's installation tutorial.

Recent activity

- Use languished during past year due to limited disk space and easy access to d0mino.
- Applied for & was awarded a grant for faster (2GHz) and bigger (40 GByte) pc for D0 analysis
  - will make it the cornerstone of a local D0 analysis cluster

New unit will be installed any day now… meanwhile

- Do fresh install of Fermi Redhat Linux 7.1.1 (get from Connie Sieh) on old pc. Fermi version is good because it includes most of the stuff you need for ups/upd.
- Follow the same procedure that I used previously to do install of D0Run p10.11.00

Steps for D0RunII Installation

- Use Heidi's tutorial as a basic guide (http://www-d0.fnal.gov/~schellma/linux/
  - Create /d0dist/dist/ & /d0usr/products
  - ftp a barebones configuration for each of these from http://www-d0fnal.gov/d0dist/dist/tarfiles/UPSd0dist.tar.gz & ~ tarfiles/UPSd0uprod.tar.gz.
  - followed Heidi's instructions up to **Getting a real version of D0 code**

Steps for D0RunII Installation ...

- This includes getting current version of kai compiler (now free) :installed kai v4_0f -f Linux +2.2 -q “node-locked”
- switch to instructions of D. Casey http://www.pa.msu.edu/~casey/d0/d0codeinstallation.html
- get ups products for main ups db

Steps for D0RunII Installation ...

- Upd install -h www-d0.fnal.gov D0RunII p10.11.00 -q dist -G’ -c’
- follow D. Casey’s instructions for updating ups db and D0RunII table.
- Use A. Duperrin’s steps for ftp of D0RunII p10.11.00 binaries. This takes up 3-4 Gbytes now, so I had to extract the binaries I absolutely need from another linux pc.

Presently testing the system

- Can do things like run root and the kai compiler
- When I try to do runreco on data using the prescription from the Algorithms page, I get hung up with “.so” libraries that don’t make sense.
- Next: continued testing, troubleshooting and installation on new, bigger, faster pc.